Local Hazard Mitigation Plan ANNEX

City of Menlo Park

Introduction

The City of Menlo Park is an average-sized city in San Mateo County, California. Menlo Park, incorporated in 1927, is situated on the San Francisco Peninsula midway between San Francisco and San Jose. The municipality of Menlo Park covers 19 square miles. The City has a population of 30,875 people, based on the 2000 census[1]. Several Menlo Park businesses play an important role in providing regional services, some of the largest employers in the non-manufacturing area are: Sun Microsystems and Stanford Research Institute. The total General Fund Operating Budget in fiscal year 2005-06 is $28,882,312. The total City operating budget for all funds is $67,779,957, and for Capital projects is $23,537,287. The City employs 201 full time, 46 part time and 4 contract positions. While the City provides local police services, fire services are supplied by Menlo Park Fire Protection District.

[1] For complete Census information on this city, see **http://www.bayareacensus.ca.gov/**.

The Planning Process

The process of preparing this plan was familiar to the City of Menlo Park. The City has a Safety Element to its General Plan, last updated June 22, 1976, that includes a discussion of fire, earthquake, flooding, and landslide hazards. In addition, the City routinely enforces the requirements of the California Environmental Quality Act (CEQA) (which, since 1988, have required mitigation for identified natural hazards). The City's effort has focused on building on these pre-existing programs and identifying gaps that may lead to

disaster vulnerabilities, in order to work on ways to address these risks through mitigation.

Many of the activities conducted by the City were fed into the planning process for the multi-jurisdictional plan. The City participated in various ABAG workshops and meetings, including the general "kick-off" meeting. In addition, the City has provided data on the City's unreinforced masonry buildings. Finally, the City provided information on facilities that are viewed as "critical" to the Association of Bay Area Governments. Key City staff met on multiple occasions between November 2005 and February 2006 to identify and prioritize mitigation strategies appropriate for the City. Departments involved in this meeting included the City Managers Office, Police Department, Community Development, and Public Works. At these meetings, the general priorities and appropriate City departments were identified. The City placed the DRAFT Hazard Mitigation Plan with strategies prioritized by City staff on its website, providing opportunity for the public to comment. The resolution adopting the plan and strategies was approved by the City Council on April 10, 2007. The mitigation strategies are intended to be supplementary information to the Safety Element of the General Plan. The next time the Safety Element is updated; this document will then be incorporated into its text.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area; five related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought). These hazards all impact the community

of Menlo Park, except for surface faulting. Surface faulting is not a hazard in the City of Menlo Park because no active faults are located in the City.

While the City has undertaken a number of general hazard mapping activities since the first Safety Element was prepared by the City, all of these maps are less detailed and are not as current as those shown on the ABAG website at:

http://quake.abag.ca.gov/mitigation/.

The Wildland Urban Interface – Fire Threatened Communities map shows Menlo Park as being at risk in the area to the west of El Camino Real. Based on discussions with Menlo Park Fire Protection District, the map should not be used for planning in this portion of the City. The emphasis should be based on the San Mateo County Wildfire Maps until further mapping, or revisions of this mapping, is completed by the California Department of Forestry.

Information on disasters declared in San Mateo County is at:

http://quake.abag.ca.gov/mitigation/disaster-history.html.

The City examined the hazard exposure of City urban land based on the information on ABAG's website at http://quake.abag.ca.gov/mitigation/pickdbh2.html. Of the 4,226 urban acres in the City, the following hazard exposures were identified:

- Earthquake faulting – No active faults run through Menlo Park, so fault rupture is not considered a hazard.
- Earthquake shaking – The nearest earthquake fault is the San Andreas Fault that runs within one mile of Menlo Park's western boundary. Severe ground

shaking is possible in most of the City. A total of 3,769 acres are included in the two highest categories of ground shaking potential.

- Earthquake-induced landslides – While earthquake-induced landslides may be a hazard in Menlo Park, mapping of the hazard area has not been completed at this time.
- Earthquake liquefaction – a total of 893 acres within Menlo Park are contained within the "high" or "very high" categories of earthquake liquefaction susceptibility. Areas of Menlo Park north east of Highway 101 are generally more susceptible.
- Tsunamis – While tsunamis may be a hazard in Menlo Park, the mapping of the inundation area has not been completed at this time.
- Flooding – A total of 751 acres are included in the FEMA designated 100-year flood plain. Flood risks include overbanking from San Francisquito Creek and Atherton Creek, and tidal flooding from San Francisco Bay. The San Francisquito Creek flood plain contains approximately 800 parcels, 95% of which are residential. The tidal flood zone includes approximately 480 parcels, 75% are residential. Menlo Park is a member of the San Francisquito Creek Joint Powers Authority that is currently working with the US Army Corps of Engineers to evaluate both Creek and tidal flooding.
- Landslides – Menlo Park has 600 acres that have been mapped as having "few landslides" in the past. This area of the City is generally west of Alameda de Las Pulgas. None of the City is mapped in areas that have "many" or "mostly" landslides.

- Wildfires – Menlo Park includes 21 acres in areas of "high" wildfire threat, but no acres in either the "very high" or "extreme" categories. Much of Menlo Park, 2,451 acres, is within the threat area defined for the wildland urban interface fire threat.
- Dam Inundation – A total of 268 acres are identified in a dam failure inundation area. The potential of dam failure exists from Searsville and Felt Lakes, both located outside of Menlo Park. The largest area of threat exists along the banks of San Francisquito Creek from approximately Alpine Road to Alma Street.
- Drought – All of Menlo Park is subject to drought. The City recently completed a draft of its Urban Water Management Plan that outlines contingency plans for water distribution in the event of a water shortage.

The City examined the hazard exposure of infrastructure based on the information on ABAG's website at http://quake.abag.ca.gov/mitigation/pickdbh2.html. Of the City's 135 miles of roads, and 126 miles of pipelines, the following hazard exposures were identified:

- Earthquake faulting – No active faults run through Menlo Park, so fault rupture is not considered a hazard.
- Earthquake shaking – The nearest earthquake fault is the San Andreas Fault that runs within one mile of Menlo Park's western boundary. Severe ground shaking is possible in most of the City. A total 93 miles of roads and 89 miles

of pipelines are included in the two highest categories of ground shaking potential.

- Earthquake-induced landslides – While earthquake-induced landslides may be a hazard in Menlo Park, mapping of the hazard area has not been completed at this time.
- Earthquake liquefaction – A total 31 miles of roads and 29 miles of pipelines are included in the "high" or "very high" categories of earthquake liquefaction susceptibility. Highway 84 is shown within an area that is considered to be in the "very high" category of earthquake liquefaction susceptibility
- Tsunamis – While tsunamis may be a hazard in Menlo Park, the mapping of the inundation area has not been completed at this time.
- Flooding – A total 20 miles of roads and 20 miles of pipelines are included in the FEMA designated 100-year flood plain.
- Landslides – A total 18 miles of roads and 16 miles of pipelines are included in the area consider to have "few landslides." This area generally lies west of Alameda de Las Pulgas.
- Wildfires – One mile of road and one mile of pipeline is contained within an area considered as "high" wildfire threat.
- Dam Inundation –Eight miles of road and eight mile of pipeline are contained within a dam inundation area.
- Drought – is not considered a hazard for either roadways or pipelines.

The City examined the hazard exposure for critical health care facilities, schools, and City owned buildings based on the information on ABAG's website at http://quake.abag.ca.gov/mitigation/pickcrit.html. Critical facilities in Menlo Park include: 5 health care facilities, 13 schools, 10 city-owned facilities, 7 special district owned facilities, and 8 bridges.

City owned critical facilities include facilities necessary for recovery after a disaster, potential shelters and critical infrastructure systems such as water storage facilities and pump stations. The ten critical city owned facilities include: 1) the City Administration Building (emergency operations center); 2) Corporation yard; 3) Onetta Harris Senior Center; 4) Onetta Harris Community Center; 5) Burgess Gymnasium; 6) Burgess Recreation Center; 7) Water Reservoir #1; 8) Water Reservoir #2; 9) Sharon Heights water pump station; and 10) Bohannon stormwater pump station.

- Earthquake faulting – No active faults run through Menlo Park, so fault rupture is not considered a hazard.
- Earthquake shaking – Severe ground shaking is possible in most of Menlo Park. Within the two highest categories of ground shaking potential, critical facilities include: 5 health care facilities, 7 schools, 8 city owned facilities, 5 special district owned facilities, and 3 bridges.
- Earthquake-induced landslides – While earthquake-induced landslides may be a hazard in Menlo Park, mapping of the hazard area has not been completed at this time.

- Earthquake liquefaction – Within the two highest categories of liquefaction susceptibility, “high” and “very high” critical facilities include: 0 health care facilities, 2 schools, 3 city owned facilities, 3 special district owned facilities and 4 bridges.
- Tsunamis – While tsunamis may be a hazard in Menlo Park, the mapping of the inundation area has not been completed at this time.
- Flooding – Critical facilities that fall within the FEMA 100-year flood zone include: 1 health care facility, 1 school, 0 city owned facilities, 1 special district owned facility, and 4 bridges.
- Landslides – Within the area considered to have “few landslides”, critical facilities include: 1 health care facility, 2 schools, 1 city owned facility, 0 special district owned facilities, and 0 bridges.
- Wildfires - no critical facilities are located in either the “high” “very high” or “extreme” categories for wildland fire threat. Critical facilities that fall within wildland urban interface fire threat include: 4 health care facilities, 10 schools, 5 city owned facilities, 7 special district owned facilities, and 4 bridges.
- Dam Inundation – No critical facilities are located within a dam failure inundation area.
- Drought - All of Menlo Park is subject to drought. The City recently completed a draft of its Urban Water management Plan that outlines contingency plans for water distribution in the event of a water shortage.

While there are portions of the City located in flood-prone areas, there is only one repetitive loss property in the City based on the information at http://quake.abag.ca.gov/mitigation/pickflood.html.

The City plans to work with ABAG during 2005 - 2006 to improve the risk assessment information being compiled by ABAG by providing information on soft-story apartments located in the City.

Drought, though a potential problem in the City, is not fully assessed. The City will work with ABAG and various water supply agencies on this issue.

The City plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities, which might result from any of the hazards previously noted. The ABAG Annex states that ABAG will be doing this work in 2005 through early 2006.

As these impacts are not fully developed, the City has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes, wildfire, and flooding pose a significant risk for potential loss.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, City of Menlo Park staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed at the meetings held with the City Managers Office, Police Department, Community Development, Public Works, from November 2005 through February 2006. At these meetings, all of the mitigation strategies were reviewed. The tentative decision on priority was made based

on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage. Currently only six strategies have been given a high priority: Housing – Public Education (1); Infrastructure – Multi Hazard (3) and Government – Critical Facilities (2). However, several are shown as not yet considered. As these strategies are evaluated, it is likely that some may be revised to a high priority. Costs have not been placed on the four high priorities. Once a complete assessment has been made, a cost will then be assigned. Over time, the City is committed to developing better hazard and risk information to use in making those trade-offs. The City is not trying to create a disaster-proof region, but a disaster-resistant one. In addition, several of the strategies are existing City programs. These draft priorities were first submitted to the City Manager for review. The draft priorities were then provided to the City Council for its review. The public was provided with an opportunity to comment on the DRAFT priorities via our website and at a public meeting. The final strategies (as shown in the attached Table) will become an Implementation Appendix to the City's Safety Element the next time the General Plan is amended.

The Plan Maintenance and Update Process

The Emergency Operations Coordinator, within the City of Menlo Park Police Department, will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item on the agenda of the meeting of

City department heads at least once a year on the anniversary of its adoption. At that meeting, the department heads will focus on evaluating the Annex in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated.

The City of Menlo Park is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The Emergency Operations Coordinator will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in a multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the City will provide the opportunity for the public to comment on the updates. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics.

Attachments